CONTRIBUTIONS TO A KNOWLEDGE OF THE HYMENOPTERA OF BRA-ZIL, NO. 6.-A COLLECTION FROM RIO GRANDE DO SUL AND SÃO PAULO.

BY WILLIAM J. FOX.

The small collection on which the present paper is based was received for identification from the Museu Paulista of São Paulo, Brazil, and is of interest through the large number of species which are not represented in the Herbert Smith collection, on which the previous papers of this series are based, which would seemingly indicate that the fauna of the southeastern region of Brazil differs considerably from that of the more inland northern States, Matto Grosso and Para, where the Smith collection was largely made.

Unless otherwise stated, the specimens were collected in Rio Grande do Sul. The types of new species are the property of the Musen Paulista.

Elis hyalina Sauss.
Elis nigra Sauss.
Elis regina Sauss.
Elis costalis Lep.
Elis Servillii Lep.
Elis Gerstaeckeri Sauss.

Elis Lucasia Sauss.

The specimen before me agrees with Saussure's description except that it is much larger than any of his specimens; it measures 45 mm. in length.

Tiphia cayennensis Spin. Pepsis nuda n. sp.

S.—Blue-green, legs bluest; antennæ with first two joints bluish, the third to seventh or eighth fuscous, the remaining joints fulvous; wings black with purplish and bluish iridescence, crossed by a broad yellowish white band which is separated from base of wing by a distance almost equalling its width, and its outer margin is just about in the centre of anterior wing; in the hind wing this band is somewhat broader; pubescence throughout dark

Clypeus emarginate, but not deeply; frontal impression strong. Middle segment raised somewhat down middle of upper surface, with coarse irregular transverse rugæ extending to, but not on, the sides, and are weakest in the depressed portion of upper surface; the latter is scarcely separated from the posterior face or vertical part, the two uniting rather evenly; transverso-median fold distinct, short and rather high; lateral teeth not strong, blunt; stigmatubercle obtuse, rounded; horizontal surface not rugose. Abdomen fusiform narrowest anteriorly; fourth and fifth ventral segments highly polished, entirely nude; subgenital plate a little widened apically and truncate, not keeled; third submarginal cell at top somewhat broader than at base. Length, 16 mm.

Rio Grande do Sul. One example. Allied to and resembles *P. dimidiata* Fabr., but the abdomen lacks the ventral bristles, and the wing fascia is widely separated from base of wings.

Pepsis pulchripennis Mocs. Pepsis dimidiata Fabr. Pepsis chrysoptera Burm, Pepsis aurimacula Mocs.

Rio Grande do Sul and Estado do São Paulo.

Pepsis vitripennis Sm.
Pepsis amabilis Mocs.
Pepsis planifrons R. Luc.,
Pepsis pubiventris R. Luc.
Pepsis discolor Tasch.

Rio Grande do Sul and Ypiranga.

Pepsis sinnis R. Luc. Salius (Cyphononyx) notatipennis n. sp.

♀.—About equally blue and black; head black, shining; thorax and legs changing from blue to black in certain lights; abdomen black, with blue pile on basal segments; wings fuscous, more or less yellowish—all the cells except median and submedian spotted with yellow, costal cell and base of wing blackish, apex subhyaline; hind wings yellow, darker apically; head sparsely punctured, with four depressed areas, one at each side of front and another between ocelli and eyes; antennæ short and thick; elypeus transverse, coarsely punctured anteriorly, subtruncate, bearing a few long black hairs; pronotum almost square anteriorly; middle segment subtruncate, in shape rather square, coarsely striated, the upper surface depressed medially and more broadly near sides, the postero-lateral angles rather prominent; the pile on first two dorsal

segments gives them a striated appearance; dorsals 3-5, very sparsely punctured; second ventral distinctly impressed transversely near base; ventral segments sparsely and last dorsal densely, with black hairs. Length, 22 mm.

One specimen. Allied to S. brevicornis Tasch.

Salius (Priocnemis) carinatus Lep.

- ♀.—Bluish; flagellum, mandibles and labrum black; middle segment purplish; wings black, with bluish and purplish reflections, the nervures ferruginous; clypeus incurved medially; first joint of flagellum about as long as second and two-thirds of third joints; eyes slightly converging above, the space between them at top slightly exceeding length of first flagellar joint; pronotum strongly swollen on each side; middle segment coarsely striated, medially impressed above, and with a large tubercle just behind each stigma; second ventral segment with two transverse, widely separated tubercles which are connected by a smooth fold in the form of an arch; between these tubercles the segment is depressed; abdomen beneath and apically with long black hairs. Length, 25–26 mm.
- 3.—First joint of flagellum a little longer than second; middle segment above bearing three longitudinal, deep furrows, the two outer diverging somewhat; abdomen beneath with large, sparse punctures, the tubercles obtuse, or absent, the second ventral bearing a strongly sinuous fold; subgenital plate elongate, obtusely truncate, punctate, and indistinctly impressed down the middle. Length, 22 mm.

Numerous specimens. Resembles bituberculatus Guerin, but the color is a lighter blue and the flagellum is entirely black. The subgenital plate in bituberculatus is a broad, apically rounded area, raised medially.

Salius (Priocnemis) apicipennis n. sp.

o.—Bluish, changing to black in certain lights; middle segment, mandibles and first two joints of flagellum black; flagellum joints 3 and following fulvous, the two apical joints fuscous; wings black, with purplish reflection, apex of anteriors whitish; veins black; clypeus incurved; scutellum high; middle segment coarsely striated, with two approximate, parallel, raised lines on carina extending down middle of upper surface to posterior face where they suddenly

diverge and extend beyond its middle, no tubercle behind stigma; second segment constricted at base, the ventral surface not tuberculate; subgenital plate large, broad, rounded at apex, covered with short black hairs. Length, 22 mm.

Ypiranga. One specimen.

Salius (Priocnemis) tinctipennis n. sp.

♀.—Bluish, with blackish or purplish reflections in lights; middle segment purplish; mouth and first two joints of flagellum, black; remaining joints fulvous; anterior wings fusco-ferruginous—black at extreme base, then ferruginous—yellow predominating as far as marginal cell, then fuscous, with the apex whitish; hind wings yellow, margined apically and posteriorly with fuscous; elypeus incurved, bearing long black hair; eyes distinctly converging above, the space between them at vertex a little greater than the length of second joint of flagellum, the latter joint not two-thirds as long as the first joint; pronotum strongly swollen laterally; scutellum bearing long, black, erect hairs; middle segment coarsely striated transversely, not strongly impressed medially, not tuberculate; second ventral with two, small, widely separated, transverse tubercles, which slope toward base of segment. Length, 23–28 mm.

Three specimens. This species reminds one of a *Pepsis*, especially *Pepsis discolor* Tasch.

Salius (Priocnemis) Iheringii n. sp.

♀.—Black, including first two, and base of third joints of antennæ; remainder of antennæ fulvous; wings fulvous, reddish medially, black at extreme base; clypeus with large shallow punctures anteriorly, its fore margin subtruncate, not or but slightly incurved; middle segment coarsely striated; second abdominal segment with shallow, sparse punctures basally, the ventral surface not tuberculate, but with two flat raised areas separated by a depression. Length, 22–23 mm.

Rio Grande do Sul and Estado do São Paulo. Three specimens. Close to S. dumosus Lep., but larger, the clypeus not or scarcely incurved and second ventral not tuberculate.

Salius (Priocnemis) flavipennis Lep. Salius (Priocnemis) carinatus Lep.

Rio Grande do Sul and Estado do São Paulo.

Salius (Priocnemis) tomentosus Tasch.

Ypiranga.

Salius (Priocnemis) dumosus Lep.

Rio Grande do Sul and Estado do São Paulo.

Pompilus erubescens Tasch.

Pompilus bituberculatus Spin. (= vulpes D. T.).

The *Pompilus bituberculatus* of Guerin belongs to the genus *Salius*. Therefore the changing of the name of Spinola's *Pompilus bituberculatus* by Dalla Torre is unnecessary, and not to be followed.

Pompilus argenteus Tasch.

Ypiranga.

Pompilus areatus Tasch.

Pompilus amethystinus Fabr.

Ypiranga.

Pompilus Hempelii n. sp.

♀.—Black; wings pale yellow, with a pale fuscous apical band; head convex in front, impressed; clypeus very short, transverse, subtruncate, its fore margin shining; antennæ inserted close to base of clypeus, tolerably short, not as long as head and thorax, the flagellum tapering but little to apex, the first joint a little longer than second; eyes somewhat converging above; thorax narrow and elongate; pronotum indistinctly subangulate posteriorly; middle segment not impressed above, very indistinctly so posteriorly; tibiæ spinose, but the hind pair feebly so; no tarsal comb; claws armed with a tooth within near base; abdomen with black hairs at apex; cubital vein of hind wings originating beyond apex of submedian cell; first recurrent vein received by second submarginal in about middle; second recurrent vein sinuous, received by third submarginal before middle; the latter cell narrowed about one-half above. Length, 11 mm.

Ypiranga (August 16), A Hempel. According to Kohl's tables of the Pompilida this species falls into his Group 7 of the genus *Pompilus*.

Ammophila abbreviata Fabr. Sceliphron fistulare Dhlb. Sphex subhyalinus n. sp.

—Black; head and thorax with black pubescence, no silvery
spots; wings hyaline, very faintly tinged with yellow, and with

darker apical margin, the nervures forming the submarginal and discoidal cells brownish; inner eye-margins parallel: clypeus very similar to that of *S. fuliginosus*; space between hind ocelli, if anything, very slightly less than that between them and eyes; scutellum flat, not impressed; postscutellum impressed; middle segment almost smooth, subopaque; metatarsus of fore leg bearing at least nine long spines outwardly; petiole fully as long as second joint of hind tarsus; abdomen shining, nude, with the exception of a few long black hairs beneath and apically. Length, 28 mm.

Ypiranga. One specimen. Related to *fuliginosus* and *caliginosus*, but easily distinguished by pale wings, entire scutellum, etc.

Sphex caliginosus Er. Sphex fuliginosus Plug. Sphex ruficaudus Tasch.

The single specimen in the collection represents a variety with dark wings (= S. proximus Sm.).

Sphex dubitatus Cress.
Sphex ingens Sm.
Sphex (Chlorion) hemiprasinus Sichel.
Larra americana Sauss.
Monedula surinamensis De G.
Monedula signata Linné.
Monedula magnifica Perty.
Monedula punctata Fabr.
Iguape, December 21.

Monedula arcuata Burm.
Tachytes scalaris Tasch.
Trypoxylon fuscipenne Fabr.
São Paulo.

Trypoxylon ornatum Sm.
São Paulo,
Cerceris basalis Sm.
Montezumia sepulchralis Sauss.